

The examples from which this species is described measure respectively 25·10, 26·10, and 28·30 inches, and were all taken in Port Jackson, where this species is locally known as the "Drummer"¹. I have never seen a small specimen of this fish.

Breeding: only one, the largest of my specimens, showed any signs of breeding; this was a male with the milt but little developed; all three were taken during the month of August.

As food: not held in any estimation, and commanding no sale in the market, nevertheless it is, in my opinion, quite equal to the other herbivorous Sparoids.

Habits: in these it is a true rock-fish, dwelling in the crevices and indentations of our rocky shores, where it finds abundant food and shelter; it is not given to roaming, and is only taken by the trammel, one end of which is attached to the shore, against which the mesh must actually lie, or else the fish would assuredly pass inside, whence it happens that this species is almost always caught within a few feet of the shore.

Note.—From Dr. Ramsay's MS. notes on Australian Fishes, I find that, so far back as 1881, he noticed these differences with regard to the dentition, but never published any communication thereon.

5. On the South-African Tortoises allied to *Testudo geometrica*. By G. A. BOULENGER.

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(Plates LVII. & LVIII.)

Upon the suggestion of the Rev. Mr. Fisk, of Cape Town, who has enriched the Society's Menagerie with so many interesting Reptiles, I have undertaken a reexamination of the South-African Tortoises allied to *Testudo geometrica*, and am able to distinguish as many as seven well-marked species, of which the diagnoses follow. The specimens named *T. trimeni*, after the Director of the South-African Museum, and *T. fiski*, were lately exhibited in the Society's Gardens, and were unrepresented in the Natural History Museum. That named *T. smithi*, after the author of the 'Illustrations of South-African Zoology,' is established on a specimen erroneously referred by Gray to *T. verreauxii*. The true *T. verreauxii* being still unrepresented in our collections, its diagnosis is compiled from Smith's description and figure.

¹ It shares the name with *Girella elevata*, Macleay, and *Pachymetopon grande*, Günth. In the 'Annals and Magazine of Natural History' for November 1886, Dr. Günther described *Pimclepterus sydneyanus*, n. sp., from Port Jackson, and suggested that *Pachymetopon grande* (Cat. Austr. Fish. i. p. 106) may be *Pimclepterus fuscus*, Lacépède, and that *Pachymetopon squamosum*, Macleay and Alleyne (Proc. Linn. N. S. Wales, i. p. 275, pl. ix. f. 1), may be *Pimclepterus cinerascens*, Forsk., or *P. tahmel*, Rüppell.





1. *TESTUDO GEOMETRICA*, L.

Beak strongly hooked. No large tubercle on the hinder side of the thigh.

Lateral marginal plates not forming an angle with the costals. Nuchal longer than broad. Suture between the gulars longer than that between the anals; suture between the humerals as long as that between the femorals, and much longer than that between the pectorals.

Carapace black, with yellow areolæ from which yellow rays radiate; eight or twelve yellow rays on the vertebrals, nine to twelve on the costals, two to four on the marginals. Plastron brown and yellow, the two colours forming more or less ill-defined rays.

Common in the Cape Peninsula.

2. *TESTUDO TENTORIA*, Bell.

Beak strongly hooked. An enlarged tubercle on the hinder side of the thigh.

Lateral marginals usually not forming an angle with the costals. Nuchal minute. Suture between the gulars as long as, or shorter than, that between the anals; suture between the humerals longer than that between the pectorals or the femorals.

Carapace black, the centre of the areolæ with a small yellow or orange spot, from which narrow rays of the same colour radiate; eight to twelve rays on the vertebral, twelve to fourteen on the costals, three or four on the marginals. Plastron brown in the middle (inner half of abdominal plates), yellow on the sides.

Common at Beaufort West.

3. *TESTUDO TRIMENI*, sp. n. (Plate LVII.)

Beak very feebly hooked. No enlarged tubercle on the hinder side of the thighs.

Lateral marginals forming an angle with the costals, a convex border with a well-marked longitudinal groove. Nuchal minute. Suture between the gulars as long as, or shorter than, that between the anals; suture between the humerals not, or but little, longer than that between the pectorals or the femorals.

Carapace black, with broad yellow or orange rays radiating from a small spot on the areolæ; five or six rays on the vertebral plates, and four to eight on the costals; a yellow spot or streak at the junction of two plates; one or two rays on each marginal. Plastron dark brown in the centre, with yellow rays, yellow on the sides.

Length of carapace of adult 105 millim.

Mouth of the Orange River.

4. *TESTUDO VERREAUXI*, Smith.

Beak very feebly hooked. No enlarged tubercle on the hinder side of the thighs.

Lateral marginals forming an angle with the costals. Nuchal well developed, a little longer than broad. Suture between the gulars as long as that between the anals; suture between the humerals much longer than that between the pectorals or the femorals.

Carapace dark brown, each dorsal and costal plate with four or five yellow rays proceeding from the yellow areolæ. Plastron yellow, dark brown in the middle.

Near the sources of the Orange River.

5. *TESTUDO SMITHI*, sp. n.

Beak feebly hooked. A large tubercle on the hinder side of the thighs.

Lateral marginals not forming an angle with the costals. Nuchal longer than broad. Suture between the gulars nearly as long as that between the anals; suture between the humerals much longer than that between the pectorals or the femorals.

Carapace dark brown, with radiating, narrow, yellow, black-edged rays, meeting in the centre of the areolæ; plastron yellow, with dark brown rays, the brown predominating in the middle.

Length of carapace of adult 115 millim.

A single specimen, with the mere indication "S. Africa."

6. *TESTUDO FISKI*, sp. n. (Plate LVIII.)

Beak feebly hooked. A large tubercle on the hinder side of the thigh.

Lateral marginals not forming an angle with the costals. Nuchals small, equilateral. Suture between the gulars shorter than that between the anals; suture between the humerals much longer than that between the pectorals or the femorals.

Carapace with brownish-yellow and black rays of nearly equal width, radiating from the yellow areolæ; six black rays on each vertebral and costal plate, and two on each marginal; the anterior and posterior pair of black rays on the costal and vertebral plates meeting their fellows form three series of ocelli. Plastron dirty yellow, brown in the middle.

Length of carapace of adult 75 millim.

A single male specimen, from De Aar, not far from Hopetown, was presented alive to the Zoological Society by Mr. Fisk.

7. *TESTUDO SEMISERRATA*, Smith.

Beak strongly hooked. A large tubercle on the hinder side of the thighs.

Lateral marginals not forming an angle with the costals; anterior and posterior marginals forming a strongly serrated edge. Nuchal longer than broad. Suture between the gulars as long as, or longer than, that between the anals; suture between the humerals much longer than that between the pectorals or the femorals.

Carapace with brownish-yellow and dark brown or black radiating rays, usually of nearly equal width, six to ten in number on the vertebral and costal plates. Plastron yellowish, with dark brown rays.

Carapace of adult 115 millim.

Common in the districts between Latakoo and the Tropic of Capricorn.